



SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 17 86 49 17

Classification of the application (IPC):
E21B 34/08, E21B 43/12, F16K 31/22

Technical fields searched (IPC):
E21B, F16K

DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
A	WO 2014081306 A1 (ACONA INNOVALVE AS [NO]) 30 May 2014 (2014-05-30) * page 1, line 3 - page 2, line 2 * * page 9, line 1 - page 13, line 35 * * page 13, line 18 - line 35; figures 1-5c *	1-16
A	WO 2015199545 A1 (AADNØY BERNT SIGVE [NO]) 30 December 2015 (2015-12-30) * page 4, line 28 - page 5, line 9 * * page 5, line 25 - page 7, line 10; figures 1-4, 7, 8 *	1-10, 16
A	US 2013068467 A1 (ZHOU SHAOHUA [SA]) 21 March 2013 (2013-03-21) * paragraphs [0003], [0043] - [0054]; figures 1-20 *	1-10, 16
X	US 2006076150 A1 (CORONADO MARTIN [US] ET AL) 13 April 2006 (2006-04-13) * paragraphs [0009] - [0011], [0032] - [0035]; figures 1-3B *	11-15

The supplementary search report has been based on the last set of claims valid and available at the start of the search.

Place of search The Hague	Date of completion of the search 08 September 2020	Examiner Jucker, Chava
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CATEGORY OF CITED DOCUMENTS

X: particularly relevant if taken alone	P: intermediate document
Y: particularly relevant if combined with another document of the same category	T: theory or principle underlying the invention
A: technological background	E: earlier patent document, but published on, or after the filing date
O: non-written disclosure	D: document cited in the application
& : member of the same patent family, corresponding document	L: document cited for other reasons

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LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-10, 16
Apparatus and method for controlling fluid flow

2. claims: 11-15
Orientation means

All further search fees have been paid within the fixed time limit. The present (supplementary) European search report has been drawn up for all claims.

The supplementary search report has been based on the last set of claims valid and available at the start of the search.

Place of search The Hague	Date of completion of the search 08 September 2020	Examiner Jucker, Chava
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ANNEX TO SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 17 86 49 17

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on 08-09-2020
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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